UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/492,632	01/27/2000	Ernst-Michael Hamann	GE998-005	1119

7590 01/05/2005	EXAMINER
IBM Corporation	ZIA, SYED

ART UNIT	PAPER NUMBER
2131	

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DATE MAILED: 01/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communicati n appears on the cover sheet with the correspondence address --

Period for Reply

> A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
> THE MAILING DATE OF THIS COMMUNICATION.
> - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
>   after SIX (6) MONTHS from the mailing date of this communication.
> - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
> - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
> - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
>   Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
>   earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *30 August 2004*.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-13 and 15* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *1-13 and 15* is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☒ All   b) ☐ Some * c) ☐ None of:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____.
      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on August 30, 2004 has been entered.

Response to Amendment

2.   This office action is in response to amendment filed on August 30, 2004. Original

application contained Claims 1-15. Applicant cancelled claim 14, and amended Claims 1, 4, 5, 9,

11, and 12. The amendment filed have been entered and made of record. Presently pending

claims are 1-13, and 15.

Response to Arguments

Applicant's arguments with respect to claims 1-13, and 15 have been considered but are

moot in view of the new ground(s) of rejection.

Drawings

3.   The drawings are objected to by the draftsperson. Please refer office action dated

October 30, 2003 (Paper No. 6) for detailed description. A proposed drawing correction or

corrected drawings are required in reply to the Office Action to avoid abandonment of the

application. The objection to the drawings will not be held in abeyance.

Specification

4.   The examiner suggests the Applicant's to remove the TITLE of the invention from the

Abstract on page 23 accordingly.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 6-8 recites the limitation "the holder " in line number 3.

There is insufficient antecedent basis for this limitation in the claims.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 12-13, and 15 are rejected under 35 USC § 101 because the claimed invention is directed to non-statutory subject matter. Claims are drawn to a digital signature which is a "data structure" that is functional description material per se. The digital signature is merely recited to have data component "additional information" and a "document extract value". The recitation of the "additional information" as being "generated by a device ..." not change the nature of the claim from being functional description material in the form of a "data structure" that per se is a non-statutory subject matter under 35 USC § 101.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1.   Claims 1-13, and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by

Schaefer-Lorinser (U.S. Patent No. 6,662,151 ("Schaefer-Lorinser " hereinafter).

2.   With respect to claim 1, Schaefer-Lorinser teaches a method (Fig.2) for generating a

digital signature in a signature device (i.e. chip card) having a signature program and certificate

with signature key stored thereon and certificate with signature key stored thereon for the signing

(col.3 line 52 to col.4 line 5) of a document (i.e. electronic purse), wherein the digital signature

identifies at least one characteristic (i.e. device identification number) of said signature device

(col.4 line 6 to line 13), comprising the step of:

        receiving input information to said signature device (col.4 line 24 to line 26);

        executing said signature program by the steps of: creating a signature data set comprising

at least the received information, at least one identifying characteristic to identify said signature

device, and a document extract value of the document for signing; and creating an expanded

digital signature by encrypting (i.e. cryptogram e1) the signature data set with the aid of a

signature key stored in said certificate (col.4 line 24 to line 51).

3.   With respect to claim 9, Schaefer-Lorinser teaches an electronic signature device (i.e.

chipcard) for generating a digital signature to sign a document (i.e. electronic purse) (Fig.2)

comprising:

        a receiver for receiving input information (Fig.1, and col.4 line 24 to line 26);

        at least one storage location for storing (col.3 line 7 to line 10) at least a signature

program and a certificate with signature key (col.3 line 52 to col.4 line 5);

a data processor component for executing said signature program comprising at least a component for creating a signature data set comprising at least the received information, at least one identifying characteristic (i.e. device identification number) identifying the signature device, and a document extract value of the document (i.e. electronic purse) for signing (col.3 line 10 to line 32); and an encryption component for creating an expanded digital signature by encrypting (i.e. cryptogram e1) the signature data set with the aid of a signature key stored at said signature device (col.4 line 24 to line 51).

4.   With respect to claim 11, Schaefer-Lorinser teaches a method (Fig.2) a program storage device readable by machine, tangibly embodying a program of instructions executable by the machine (Fig.1, computer center, and chipcard) to perform method steps for generating a digital signature to sign a document in a signature device having a signature program and certificate with signature key stored thereon (col.3 line 52 to col.4 line 5), said method steps comprising:

receiving input information to said information device (Fig.1, and col.4 line 24 to line 26);

executing said signature program by the steps of creating a signature data set comprising at least the received information, at least one identifying characteristic (i.e. device identification number) for identifying said signature device, and a document extract value of the document for signing (col.3 line 10 to line 32); and creating an expanded digital signature by encrypting (i.e. cryptogram e1) the signature data set with the aid of a signature key stored in said certificate (col.4 line 24 to line 51.

5.   With respect to claim 12, Schaefer-Lorinser teaches a method (Fig.2) improved digital

signature, wherein the improvement comprises the inclusion of additional information generated

by a device having signature certificate information stored with a signature program (col.3 line

52 to col.4line 5), said additional information identifying the signature device, in addition to a

document extract value of a document for signing (col.4 line 24 to line 51).

6.   Claims 2, 4-6, 10, 13, and 15 are rejected applied as above in rejecting Claims 1, 9, and

12. Furthermore, Schaefer-Lorinser teaches a system that relates to digital signatures, methods

for generating digital signatures, and signature devices to execute the methods.

       As per claim 2, wherein said receiving input information (i.e. identification number)

comprises procuring the value of a signature counter from said signature device (col.4 line 17 to

line 23).

       As per claim 4, wherein the receiving input information comprises procuring the

identifying characteristic to identify the signature device from said signature device (col.4 line 36

to line 51).

       As per claim 5, wherein the receiving input information comprises procuring information

as to the hardware and software environment used in creating the digital signature (col.3 line 23

to line 32).

       As per claim 6, further comprising entering an identifying characteristic to identify the

holder of the signature key prior to said receiving input information (col.4 line 23 to line 45).

       As per claim 10, wherein the device is a chipcard.

As per claim 13, wherein the additional information comprises information which

uniquely identifies it in relation to every other digital signature generated with the same signature

key (col.4line 45 to line 51).

As per claim 15, wherein the additional information comprises information on the

hardware and software environment used in generating the signature (col.3 line 56 to line 65, and

Fig.2 Sglob attributes).

7.   Claims 3, 7, and 8 are rejected applied as above in rejecting Claims 2, and 6.

Furthermore, Schaefer-Lorinser teaches a system that relates to digital signatures, methods for

generating digital signatures, and signature devices to execute the methods.

As per claim 3, further comprising, prior to said procuring, creating the signature counter

as an attribute of the signature key (i.e. signature function Scard, stored attribute of this function,

such as money, and chipcard posting/sequence number record stored in chipcard) (col. 4 line 23

to line 65).

As per claim 7, further comprising creating the identifying characteristic to identify the

holder of the signature key as an attribute of the signature key (col.4 line 23 to line 45).

As per claim 8, further comprising changing the identifying characteristic to identify the

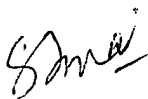holder of the signature key prior to said receiving (col.4 line 23 to line 45).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer attached PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Syed Zia whose telephone number is 571-272-3798. The examiner can normally be reached on 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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December 14, 2004